Advanced Communications Technology

BRIGHAM YOUNG UNIVERSITY

CENTER

The Center for Advanced Communications Technology was formed to commercialize multi-antennae air-to-ground communication systems. The Center's main focus is using advanced digital signal processing for reliable communication to maneuvering air vehicles (tactical aircraft and UAV's). A secondary focus is using multi-antenna technology to improve commercial wireless communications.

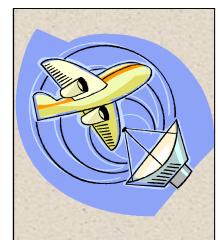
TECHNOLOGY

The Center's technology uses multiple antennae in combination with advanced signal processing to provide a solution to current communication technology, which loses contact with an aircraft during maneuvering such as rolling. The technology may also be applied to unmanned air-vehicles as well as other wireless communications such as mobile phones. Advantages of the Center's technology include its low power consumption, bandwidth efficiency, and small size.

ACCOMPLISHMENTS

After successful architectural design and software simulation of the prototype air-to-ground communication system, the Center is now working on developing the hardware. New developments have also been made in the multi-antennae military communications system. This includes repeaters placed on unmanned air-vehicles that may be reconfigured on command. This technology is being proposed to DARPA.

A license agreement has been negotiated with the university for a spinout which will be incorporated after successful test-flights in the next year.



THINK TANK

What if there was...

A way to always maintain communication with an aircraft during aerial maneuvers?

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